

Patent
Attorney's Docket No. 003300-874

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)
BENGT-ERIK OLSSON et al.) Group Art Unit: (Unassigned)
Application No.: (Unassigned)) Examiner: (Unassigned)
Filed: November 27, 2001)
For: SPECTROMETER MODULE AND)
APPLICATIONS THEREOF)

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Please amend the above-identified Application, filed concurrently herewith, as indicated.

IN THE CLAIMS:

Kindly replace claims 13, 25, and 26 as follows:

13. (Amended) The spectrometer module as in claim 1, wherein a polarizer is arranged between said variable DGD element and said detector unit, said polarizer not being aligned relative to the birefringence eigenaxes of said DGD element.

25. (Amended) A unit for monitoring an optical signal, being transmitted in an optical network, said unit comprising:

a coupler, being arranged to be inserted along a optical transmission path of said optical network, said coupler having a main in- and output, respectively, for receiving and transmitting said optical signal and at least one drop output, to which a portion of said optical signal is droppable, said drop output being connected with one of a spectrometer module comprising an input, for receiving an incoming optical signal, a variable differential group delay (DGD) element, for applying a variable birefringence retardation to said incoming optical signal, and a detector unit for detecting the power in a defined state of polarisation of a signal exiting said variable DGD element, and a monitor module as described in claim 20.

26. (Amended) A monitoring system for an optical network, comprising a plurality of network elements, such as transmitters, receivers, transmission lines, amplifiers or the like, said monitoring system comprising:

two or more monitoring stations, each of said monitoring stations being positioned between two network elements of said optical network and each of said stations comprising one of a spectrometer module comprising an input, for receiving an incoming optical signal, a variable differential group delay (DGD) element, for applying a variable birefringence retardation to said incoming optical signal, and a detector unit for detecting the power in a defined state of polarisation of a signal exiting said variable DGD element; a monitor module for measuring properties such as power, state of polarisation and degree of

polarisation of an incoming optical signal as a function of wavelength, said monitor module comprising a polarisation control module being connected with a control unit, a spectrometer module, being connected with said control unit, and a polariser being placed between said polarisation control module and spectrometer module; and a monitoring unit as in claim 25, and

a monitoring hub, being connected with each monitoring station, said hub being arranged to receive measured signal data from each of said monitoring stations, and said monitoring hub comprising a processing unit for processing said measured signal data.

REMARKS

The present Amendment modifies the claim format only so as to eliminate the use of multiple dependency.

An Information Disclosure Statement is being filed concurrently herewith.

The examination and allowance of the Application are respectfully requested.

Respectfully submitted,

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Date: November 27, 2001

Attachment to Preliminary Amendment dated November 27, 2001
Marked Up Claims 13, 25 and 26

13. (Amended) The spectrometer module as in [any one of the claims 1]
claim 1, wherein a polarizer is arranged between said variable DGD element and said
detector unit, said polarizer not being aligned relative to the birefringence eigenaxes of said
DGD element.

25. (Amended) A unit for monitoring an optical signal, being transmitted in an
optical network, said unit comprising:

a coupler, being arranged to be inserted along a optical transmission path of said
optical network, said coupler having a main in- and output, respectively, for receiving and
transmitting said optical signal and at least one drop output, to which a portion of said
optical signal is droppable, said drop output being connected with one of a spectrometer
module [as described in claim 1] comprising an input, for receiving an incoming optical
signal, a variable differential group delay (DGD) element, for applying a variable
birefringence retardation to said incoming optical signal, and a detector unit for detecting
the power in a defined state of polarisation of a signal exiting said variable DGD element,
and a monitor module as described in claim 20.

Attachment to Preliminary Amendment dated November 27, 2001
Marked Up Claims 13, 25 and 26

26. (Amended) A monitoring system for an optical network, comprising a plurality of network elements, such as transmitters, receivers, transmission lines, amplifiers or the like, said monitoring system comprising:

two or more monitoring stations, each of said monitoring stations being positioned between two network elements of said optical network and each of said stations comprising one of a spectrometer module [as in claim 1, a monitor module as in claim 20] comprising an input, for receiving an incoming optical signal, a variable differential group delay (DGD) element, for applying a variable birefringence retardation to said incoming optical signal, and a detector unit for detecting the power in a defined state of polarisation of a signal exiting said variable DGD element; a monitor module for measuring properties such as power, state of polarisation and degree of polarisation of an incoming optical signal as a function of wavelength, said monitor module comprising a polarisation control module being connected with a control unit, a spectrometer module, being connected with said control unit, and a polariser being placed between said polarisation control module and spectrometer module; and a monitoring unit as in claim 25, and

a monitoring hub, being connected with each monitoring station, said hub being arranged to receive measured signal data from each of said monitoring stations, and said monitoring hub comprising a processing unit for processing said measured signal data.